

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A catheter system for positioning a stent at a vessel bifurcation, the catheter system comprising:

a catheter including a proximal end and a distal end, the catheter comprising:

a first tubular member including a proximal end and a distal end, the first tubular member defining an inflation lumen of the catheter and extending distally from the proximal end of the catheter;

a second tubular member defining a main guidewire lumen ~~extending proximally from a distal end of the second tubular member to a proximal end of the second tubular member~~, wherein the distal end of the second tubular member is a distal end of the catheter and the proximal end of the second tubular member defines a main guidewire exit port, wherein the main guidewire lumen is configured to receive a main vessel guidewire therethrough, wherein the second tubular member is at least partially disposed within the inflation lumen of the first tubular member;

a balloon including a proximal waist coupled to the first tubular member adjacent to the distal end of the first tubular member and a distal waist coupled to the second tubular member adjacent to the distal end of the second tubular member;

a branch guidewire enclosure positioned alongside the first tubular member, wherein the branch guidewire enclosure defines a lumen configured to receive a branch vessel guidewire therethrough, the branch guidewire enclosure including a proximal end region having a proximal end and a distal end region, the [[a]] proximal end of the branch guidewire enclosure defining a branch guidewire exit port; and

a stent having a lumen and a side opening in a wall thereof, the stent positioned about at least a portion of the balloon, and wherein a distal portion of the branch guidewire enclosure is positioned through the lumen of the stent and exits at the side opening;

wherein the branch guidewire enclosure is bonded to the first tubular member only at the proximal end region of the branch guidewire enclosure ~~branch exit port~~, wherein the main

guidewire exit port and the branch guidewire exit port are located proximal of the stent and distal of the proximal end of the catheter.

2-3. (Canceled)

4. (Currently Amended) The catheter system of claim 1, further comprising a ~~bonding portion~~ material coupling the first tubular member, second tubular member, and branch guidewire enclosure.

5. (Previously Presented) The catheter system of claim 1, wherein the main guidewire exit port is positioned between 10 and 50 centimeters from the distal end of the catheter.

6-7. (Canceled)

8. (Previously Presented) The catheter system of claim 1, wherein the branch guidewire exit port is positioned between 50 and 150 centimeters from the distal end of the catheter.

9-27. (Canceled)

28. (Currently Amended) A catheter comprising:

a ~~first catheter proximal tube including extending from~~ a proximal end ~~[[to]]~~ and a distal end;

a first distal tube having a proximal end region defining a proximal open end, the first distal tube being configured to receive a first guidewire;

a second distal tube having a proximal end region defining a proximal open end, the second distal tube being configured to receive a second guidewire; ~~[[and]]~~

a balloon including a proximal waist and a distal waist, the proximal waist being coupled to the first catheter tube adjacent the distal end of the first catheter tube, and the distal waist being coupled to the first distal tube adjacent to the distal end of the first distal tube;

a stent positioned about at least a portion of the balloon, wherein the second distal tube is configured to exit through a side opening in the stent; and

a bond material configured to bond the proximal end region of the first distal tube, the proximal end region of the second distal tube, and an intermediate region of the first catheter tube having a proximal end and a distal end, the proximal end of the bond coupled to the distal end of the proximal tube, the distal end of the bond coupled to the first distal tube adjacent to the proximal open end such that the proximal open end of the first distal tube remains open to define a first guidewire exit port[[,]] and the distal end of the bond coupled to the second distal tube adjacent to the proximal open end such that the proximal open end of the second distal tube remains open to define a second guidewire exit port.

29. (Previously Presented) The catheter of claim 28, wherein the first and second guidewires are configured to exit the catheter at the proximal open ends of the first and second distal tubes.

30. (Previously Presented) The catheter of claim 28, wherein the first guidewire and the second guidewire are each less than 50 centimeters in length.

31. (Canceled)

32. (Previously Presented) The catheter of claim 28 wherein the second distal tube is detached from the first distal tube outside of the bond.

33. (Previously Presented) The catheter of claim 31, wherein the second distal tube does not include a balloon.